## **BOOK NOTICE**

Horned Beetles, A Study of the Fantastic in Nature by Gilbert J. Arrow, edited by W. D. Hincks. Dr. W. Junk, The Hague. Netherlands. 1951.  $8\frac{1}{4} \times 6$  inches. 154 pp. + 15 plates. Dutch Guild. 8.80.

This book brings together the thoughts of the late Gilbert J. Arrow of the British Museum on reason and purpose for the development of "horns" in Lamellicorns and other beetles, a subject which interested him and to which he devoted a great deal of study during his long life. An author's index, subject index and selected bibliography have been added, but otherwise the text remains as it was at the death of its author on October 5, 1948.

The book introduces the subject, then in the remaining eight chapters covers; horns and similar features in beetles; the habits of beetles; horns in male and female beetles; mandible-horns; outgrowth horns; comparison with higher animals; Darwin's theory of sexual selection, and the origin and significance of beetle horns.

This book is of importance to the coleopterist and the naturalist. It is shown that there is no quick, simple explanation of the significance of beetle horns. Many facts are given to show their lack of contribution to the welfare of either the male or female sex. Charles Darwin in his "The Descent of Man" concluded that insect horns might best be explained as ornaments serving to attract the opposite sex. But this is shown to be not true, since the female has little opportunity nor ability to exercise selection in the process of mating. It is concluded that beetle horns are, generally, quite useless and although Mr. Arrow has considered the evidence in support of all theories, he is unable to assign a real function to these interesting structures.

This is a well written and interesting book and is a valuable contribution to the study of the fantastic in nature.—F. A. S.